Close call at Source Lake, WA 1-24-02

Narrative provided by John Stimberis—Washington State Department of Transportation Avalanche Control Program on Snoqualmie Pass

Accident Narrative

On Thursday January 24, 2002 two Seattle area men left for a winter camping trip. Their destination was Kendall lakes near Snoqualmie Pass. The two men, Dave and Alex, both 27, were moderately experienced in the backcountry, although neither of them was wearing a transceiver, nor did they check the avalanche forecast. The Northwest Weather and Avalanche Center had issued an avalanche watch on Wednesday January 23rd for considerable danger above 3-4000 feet and moderate below, becoming considerable below 7000 feet Wednesday afternoon, and increasing to high below 7000 feet by Thursday. On Thursday morning NWAC issued an avalanche warning for a high danger below 7000 feet. The two had been to Kendall Lakes before and felt that the avalanche danger was minimal. Upon arriving at Snoqualmie Pass they realized they had forgotten the Sno-Park permit and decided to go elsewhere and not risk getting a ticket. The two headed for Alpental Ski Area where they could park for free and head up the valley to Source Lake.

They planned to go at least to Source Lake, and possibly cross a steep ridge to Snow Lake if the avalanche danger didn't look bad. They arrived at Source Lake around 1500 hrs and felt that crossing the ridge to Snow Lake would be hazardous, so they began to look for a campsite near the lake. The two recognized that several avalanche paths reach Source Lake (3750') from Chair Peak (6238') and so they decided to locate their camp downstream from the lake. At the outlet of Source Lake is a large mound, beyond which are several hundred yards of flat ground, intermixed with small trees and then finally large timber. The pair had hoped to camp in the larger timber along the creek, but the trees were unloading large amounts of snow from their branches and it looked hazardous to set up camp there. They instead opted for the edge of the big trees.

Around 1830 hrs the two men were in the tent. Dave was in the main part of the tent wearing warm clothing and socks. Alex was in the vestibule area cooking dinner. He had warm clothing on, but no socks. Both doors to the tent were partially or fully open at this time. They heard an avalanche from the mountain above and they stopped what they were doing. Without any further warning the slide hit the tent and the men were sent tumbling in the snow and darkness. They believe they were carried about 75' before stopping. Dave was partially in the tent and buried under the snow. He was upright with tent fabric wrapped across his face. Dave was able to move his body slightly, but other wise he was trapped in the snow. He used his teeth to rip the tent fabric at his face in order to better breathe. His description was that the snow set up like cement around him.

Meanwhile Alex had been tangled up in a tree, and although he was buried the snow was somewhat looser around the tree and he was able to free himself. Once free, Alex began to search for Dave. Dave was about ten feet away and buried about one foot under. Alex was able to locate him and dig him out with his bare hands. By this time Alex's hands and feet were completely numb. Once out the pair searched around for their gear. Dave looked in the hole he had come out of and found a sleeping bag, a little bit of food, and a few stuff sacks. Besides those items everything else was buried. The tent, their skis, boots, shovels, sleeping pads, etc. were all gone.

As they were searching and preparing to leave they heard another avalanche. Rather than risk being in this location any longer the pair fled the area. They quickly sunk into the new snow, as they were at the toe of the debris. They swam through the deep snow and got back on the trail they had come in on. Once on the trail they made booties out of the stuff sacks they had recovered. Within an hour they were back at their vehicle. Although neither was seriously injured in the ordeal, Alex did suffer from numb finger tips and toes for about a week afterwards. No serious signs of frostbite were noted.

Weather Summary

The weather leading up to this event was fairly dry for the early part of the month and only six and one half inches of snow fell during the first eleven days of January. The following weather has been extracted from a nearby 3000 ft elevation study plot. The 11th and 12th of January produced ten and one half inches of snow and 2.42" rain. This was followed by three dry days with low temperatures in the low twenties to upper teens. An inch and a half of low-density snow fell on the 17th followed by a cool dry day. The morning of the 19th brought ten inches of new snow at nine percent density, followed by two days in which nineteen inches of twelve percent density snow fell. The morning of the 22nd saw six and a half inches of four percent snow, with the next two days adding fourteen inches of very dense snow (averaging fourteen percent density). The new snow was accompanied by 1.09" of rain. The day of the 24th saw temperatures right around freezing with precipitation changing between snow and rain at nearby Snoqualmie Pass throughout the day. From 0700 to 1800 hrs on the 24th 1.11" of precipitation had fallen at an average rate of 0.09"/hr. The hour preceding the slide reported 0.13"/hr. Temperatures throughout the day were in the low to mid thirties at the base of the nearby Alpental ski area (3200") and close to thirty degrees at the top of the area (5400").

The 26th of January brought clear skies to the area. Large fractures were seen on Chair Peak above Source Lake. Alpental Patrollers reported several large fractures both during and sympathetic to control measures on the 25th. Fractures up to six feet were seen both in and out of the ski area. It is likely the avalanche that reached Source Lake on the 24th started high on Chair Peak and was a class 4 avalanche, traveling approximately 2000 ft vertical. Estimates of the fractures on Chair Peak are in the six to eight foot range.

The remaining days of January saw another forty-nine inches of snowfall. Another fifty-three inches of snow has fallen in February through the 12th. It is most likely that the lost equipment will remain buried until late spring. Fortunately the two men caught in the slide were able to make it out to tell their story.